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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,745	01/21/2004	Jeffrey P. Jones	2002B124-2	3637
23455	7590	03/22/2006	EXAMINER	
EXXONMOBIL CHEMICAL COMPANY 5200 BAYWAY DRIVE P.O. BOX 2149 BAYTOWN, TX 77522-2149			LEUNG, JENNIFER A	
			ART UNIT	PAPER NUMBER
			1764	

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/761,745

Applicant(s)

JONES ET AL.

Examiner

Jennifer A. Leung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 59,95,102 and 103 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 59,95,102 and 103 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment submitted on January 11, 2006 has been received and carefully considered. The changes made to the specification are acceptable. Claims 1-58, 60-94 and 96-101 are cancelled. Claims 59, 95, 102 and 103 are under consideration.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 59, 95, 102 and 103 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 59, it is unclear as to the relationship between "a heating unit" in line 7 and "a heating device" set forth in line 3.

Regarding claim 95, "the first material" (line 2) lacks proper positive antecedent basis. In addition, it is noted that the claim depends from cancelled claim 60.

Regarding claim 102, "the first material" (line 2) lacks proper positive antecedent basis. Also, it is noted that the claim depends from cancelled claim 60. Furthermore, the commercial alloys of "TD", "758" and "276" lack proper positive antecedent basis because said alloys are not included in the Markush group set forth in claim 59, lines 10-11. (The claimable commercial alloys are "closed" to the group of alloys set forth in claim 59).

Regarding claim 103, "the first material" (line 2) lacks proper positive antecedent basis. Also, it is noted that the claim depends from cancelled claim 60. Furthermore, the commercial

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alloys of “602”, “690” and “263” lack proper positive antecedent basis because said alloys are not included in the Markush group set forth in claim 59, lines 10-11. (The claimable commercial alloys are “closed” to the group of alloys set forth in claim 59).

***Response to Arguments***

3. Applicant’s amendments and corresponding arguments have overcome the previous rejections made under 35 U.S.C. 102(b) and 35 U.S.C. 103(a). However, the following new ground(s) of rejection are made in view of the newly found prior art reference(s).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 59 is rejected under 35 U.S.C. 102(b) as being anticipated by Cherish et al. (US 4,282,010).

Cherish et al. (FIG. 1-3; column 3, line 24 to column 4, line 21) discloses an apparatus comprising:

an inlet including a heating device (i.e., an inlet for supplying inlet nozzle 40 with a feedstock at “a temperature in the range of 500 °F”; see column 3, lines 39-45. Therefore, the inlet must inherently comprise a heating device, not shown, for heating the feedstock up to said temperature);

a feed introducing nozzle including a first generally tubular member (i.e., an inner tube 28) defining a feedstock pathway, the tubular member 28 having a first end (i.e., adjacent to

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nozzle 40) receiving the feedstock from the heating device and a second end adjacent to a reactor unit (i.e., a fluidized bed reactor 10), and an inner surface forming a conduit (i.e., as defined by the inner surface of the inner tube 28), wherein at least a portion of the inner surface is formed of a commercial alloy comprising Incoloy 800 (see column 3, lines 34-36); and

a second larger diameter cylindrical tube (i.e., an outer tube 32) oriented coaxially to the feed introduction nozzle thereby forming an outer cooling pathway around the feedstock pathway (i.e., an outer annulus 36 for flowing a cooling and fluidization booster medium supplied by inlet nozzle 44; column 3, lines 54-59), wherein the cooling pathway 36 is closed-off at an end corresponding to the first end of the nozzle (see FIG. 2) so that cooling medium can flow toward the reactor unit 10 and exit the feed introduction nozzle within the reactor unit through a diluent outlet (i.e., via perforations 56; FIG. 3).

Instant claim 59 structurally reads on the apparatus of Cherish et al.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 95, 102 and 103 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cherish et al. (US 4,282,010).

Regarding claim 95, Cherish et al. is silent as to whether another commercial alloy (such as 825 or 400) may be substituted for the Incoloy 800 used as the commercial alloy forming the inner surface of the inner tube 28. In any event, it would have been obvious for one of ordinary skill in the art at the time the invention was made to substitute another suitable, known commercial alloy for the alloy forming the inner surface of the inner tube 28 in the apparatus of

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Cherish et al., on the basis of suitability for the intended use and absent showing any unexpected results thereof, because the Examiner takes Official Notice that the recited commercial alloys are well known materials in the art of nozzle construction. Furthermore, the substitution of known equivalent structures merely involves ordinary skill in the art. *In re Fout* 213 USPQ 532 (CCPA 1982); *In re Susi* 169 USPQ 423 (CCPA 1971); *In re Siebentritt* 152 USPQ 618 (CCPA 1967); *In re Ruff* 118 USPQ 343 (CCPA 1958).

Regarding claim 102, Cherish et al. is silent as to whether another commercial alloy (such as TD, 758, 625, 601 or 276) may be substituted for the Incoloy 800 used as the commercial alloy forming the inner surface of the inner tube 28. In any event, it would have been obvious for one of ordinary skill in the art at the time the invention was made to substitute another suitable, known commercial alloy for the alloy forming the inner surface of the inner tube 28 in the apparatus of Cherish et al., on the basis of suitability for the intended use and absent showing any unexpected results thereof, because the Examiner takes Official Notice that the recited commercial alloys are well known materials in the art of nozzle construction. Furthermore, the substitution of known equivalent structures merely involves ordinary skill in the art. *In re Fout* 213 USPQ 532 (CCPA 1982); *In re Susi* 169 USPQ 423 (CCPA 1971); *In re Siebentritt* 152 USPQ 618 (CCPA 1967); *In re Ruff* 118 USPQ 343 (CCPA 1958).

Regarding claim 103, Cherish et al. is silent as to whether another commercial alloy (such as 693, 602, 690, 671, 617, 263 or 956) may be substituted for the Incoloy 800 used as the commercial alloy forming the inner surface of the inner tube 28. In any event, it would have been obvious for one of ordinary skill in the art at the time the invention was made to substitute another suitable, known commercial alloy for the alloy forming the inner surface of the inner

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tube 28 in the apparatus of Cherish et al., on the basis of suitability for the intended use and absent showing any unexpected results thereof, because the Examiner takes Official Notice that the recited commercial alloys are well known materials in the art of nozzle construction. Furthermore, the substitution of known equivalent structures merely involves ordinary skill in the art. *In re Fout* 213 USPQ 532 (CCPA 1982); *In re Susi* 169 USPQ 423 (CCPA 1971); *In re Siebentritt* 152 USPQ 618 (CCPA 1967); *In re Ruff* 118 USPQ 343 (CCPA 1958).

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

\* \* \*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Leung whose telephone number is (571) 272-1449. The examiner can normally be reached on 9:30 am - 5:30 pm Monday through Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn A. Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer A. Leung  
March 18, 2006 *jal*

*Alexa Neckel*  
ALEXA DOROSHENK NECKEL  
PRIMARY EXAMINER